

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): Profile A measurement device configured to measure a profile of a part, comprising:

a feeler; ~~(4)~~ typified by

a manipulation knob ~~(14)~~ connected to the feeler~~[,]~~;

a support ~~(5)~~;

a table with two perpendicular movements, the table linking ~~(6)~~ associating the support to the feeler, ~~and immobilization means (17, 18, 19, 20; 49, 18' 19')~~ of the support compared to the profile;

a pair of displacement transducers ~~(21, 22)~~ situated between ~~the mobile portions of the table and measuring~~, the pair of displacement transducer being configured to measure displacements according to the perpendicular movements; ~~and means (7) for reading and memory storage of the displacements measured~~

a machining mandrel on which the part comprising the profile is installed; and means for reading and storing in a memory the displacements measured, wherein the support and the mandrel are mutually movable and comprise complementary immobilization means.

Claim 2 (Currently Amended): Measurement device according to claim 1, typified in ~~that wherein~~ the immobilization means of the support comprise a first pair of rests ~~(18, 19)~~ ~~(travel stops) either side of the feeler~~ and oriented in the same direction as the feeler, the feeler being situated between the travel stops.

Claim 3 (Currently Amended): Measurement device according to claim 1, typified in that wherein the immobilization means of the support comprise a pair of pins (16, 17).

Claim 4-8 (Cancelled).

Claim 9 (Currently Amended): Measurement device according to claim 1, typified in that it comprises wherein the device comprises a measurement standard (39) bearer of complementary means for the immobilization means of the support.

Claim 10 (Currently Amended): Measurement device according to claim 1, typified in that wherein the feeler comprises an oblique rod (8), and a return device (30) of the rod between two positions at either end of a U-turn, a second pair of travel stops (35, 36) of the rod at the two positions, and a holding means (33) of the rod at the two positions.

Claim 11 (Currently Amended): Measurement device according to claim 2, typified in that it wherein the device comprises reference feelers (41) associated with the first pair of travel stops rests (18, 19) (travel stops).

Claim 12 (Currently Amended): Measurement device according to claim 1, typified in that it comprises wherein the device comprises a control (28) for the-a start and a stoppage of the displacement memory storage.

Claim 13 (Currently Amended): Profile measurement process of a part (1, 1'), involving a portable feeler device (4, 4'), the process comprising according to the following steps:

[[ -]] ~~calibration of the calibrating the portable feeler device~~[[ ,]];

[[ -]] ~~assembling the portable feeler assembly of the device at a fixed position as compared with the part~~[[ ,]];

[[ -]] ~~manually displacing manual displacement of the feeler along the profile~~[[ ,]]; and

[[ -]] ~~automatically correcting automatic correction of measurement errors due to wear or deformation of the feeler, using the results of the calibration.~~

Claim 14 (New): Measurement device according to claim 1, wherein the immobilization means of the support are respectively associated to the immobilization means of the mandrel so as to determine one invariable immobilization position of the support on the mandrel.

Claim 15 (New): Measurement device according to claim 14, wherein the immobilization means of the support comprise a pair of pins, the mandrel comprises recesses having cross-section shapes corresponding to cross-section shapes of the pins, respectively, in which the pins can be engaged, the immobilization means of the support comprise a pair of travel stops, the feeler being situated between the travel stops and the travel stops being oriented in the same direction as the feeler, and the mandrel comprises lands on which the travel stops can abut.

Claim 16 (New): Measurement device according to claim 14, wherein the immobilization means of the support comprise a pair of pins, the mandrel comprises recesses having cross-section shapes corresponding to cross-section shapes of the pins, respectively, in which the pins can be engaged, the immobilization means of the support comprise a pair of travel stops, the feeler being situated between the travel stops and the travel stoops being

oriented in the same direction as the feeler, the mandrel comprises lands on which the travel stops can abut, the immobilization means of the support further comprises a screw, and the immobilization means of the mandrel comprise an internal screw thread in which the screw can be engaged.

Claim 17 (New): A measurement device configured to measure a profile of a part, comprising:

a feeler;  
a support configured to support the feeler, the support being movable;  
a table with two perpendicular movements, the table linking the support to the feeler;  
a pair of displacement transducers disposed between the mobile portions of the table, the pair of displacement transducer being configured to measure displacements of the feeler;  
a mandrel to hold the part, the mandrel being configured to hold the part during a profile measurement and during a machining of the part;  
an operation device configured to read and store in a memory the displacements measured; and  
means for complementarily immobilizing the support and the mandrel.

Claim 18 (New): Measurement device according to Claim 17, wherein the operation device comprises means for compensating the measured displacements for an excessive manipulation force causing a deformation of the feeler.

Claim 19 (New): Measurement device according to Claim 17, wherein the feeler is configured to maintain a known direction, and the operation device is configured to compensate the displacement measurements for a wear of the feeler based on a calibration

measurement and a knowledge of a portion of the feeler sliding on portions of the profile of the part.

Claim 20 (New): Measurement device according to Claim 1, wherein the feeler is configured to maintain a known direction, and the means for reading and storing is configured to compensate the displacement measurements for a wear of the feeler based on a calibration measurement and a knowledge of a portion of the feeler sliding on portions of the profile of the part.